

Interactive comment on "Measurement Report: Size distributions of inorganic and organic components in particulate matter from a megacity in northern China: dependence upon seasons and pollution levels" by Yingze Tian et al.

Anonymous Referee #3

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The manuscript by Tien et al. reports an analysis of one year-long size-segregated chemical composition of particulate matter (PM) in Tianjin, a megacity in the northern China. The characterization is comprehensive and well conducted, the quality of the data is excellent and the manuscript is well written. Nevertheless, beyond the high quality of data and presentation, in my opinion the paper flaws of scientific relevance: no new analytical techniques or data analysis are used and it is hard to see new contributions to air pollution description or its scientific knowledge. This is especially problematic considering how many (hundreds?) studies exist reporting size distribu-

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tions of PM chemical composition in Chinese mega cities (even in the same region). Sufficiently detailed examination of the existing literature on pollution in the region is also lacking as well as a careful description of the new results that this study aims to add to the scope. I don't personally have a clear idea of the requirements needed to publish in the "Measurement Report" category in ACP (this is an editorial choice more than a reviewer's task), but considering the journal level I think it should be reserved in any case to data presenting new findings, novel techniques and/or unique geographical coverage. After all, in the description of the Manuscript types on the ACP website it is clearly state that "Measurement reports present substantial new results", new results which are missing in the present study, in my opinion. All the above considerations prevent me from recommending publication in ACP in the present form. It may be a good idea (if the journal policy allows it) to give to the authors the opportunity to resubmit the paper with substantial scientific upgrades and/or to suggest the submission to lower tier journals.

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